CLAIMS

1. A dihalide represented by the following formula: [Formula 1]

$$R^3$$
 R^3
 R^3
 R^3
 R^3

- 5 (wherein R¹ and R¹ represent a halogen, R² and R² represent an alkyl group or a silyl group having a substituent, and R³ and R³ represent a hydrogen or an alkyl group).
- A dihalide according to claim 1, wherein the silyl group having the substituent is at least one selected from the group consisting of Si(CH₃)₃, Si(n-C₄H₉)₃, Si(t-C₄H₉)₃, Si(CH₃)₂(C₆H₅) and Si(CH₃)₂(n-C₁₈H₃₇).
 - 3. A dihalide according to claim 1 or 2, wherein the alkyl group is an alkyl group having a carbon number of 1-20.
- 4. A polymer compound having a structure represented by the following formula in its main chain:

[Formula 2]

(wherein R² and R² represent an alkyl group or a silyl group having a substituent, and R³ and R³ represent a hydrogen or an alkyl group).

5. A polymer compound according to claim 4, which is represented by the following formula:

[Formula 3]

$$\begin{array}{c|c}
0R^2 & 0R^2 \\
\hline
R^3 & R^3
\end{array}$$

(wherein R² and R^{2'} represent an alkyl group or a silyl group having a substituent, R³ and R^{3'} represent a hydrogen or an alkyl group, and n represents a polymerization degree and is 5-1000).

- 6. A polymer compound according to claim 4, which is a copolymer comprising the structure represented by the formula claimed in claim 4 and another structure.
- 7. A polymer compound according to claim 5, wherein the copolymer is at least one selected from the group consisting of the following formulae:

[Formula 4]

$$\left(\begin{array}{c} R^{5} R^{5} \\ R^{4} O O R^{4} \end{array} \right)$$

(wherein R⁴, R⁴, R⁵ and R⁵ represent an alkyl group),

[Formula 5]

(wherein R^6 and $R^{6'}$ represent a silyl group having a substituent, and R^7 and $R^{7'}$ represent an alkyl group),

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[Formula 6]

(wherein R⁶ and R^{6'} represent a silyl group having a substituent),
[Formula 7]

$$\left(\begin{array}{c} R^7 & R^7 \\ \\ R^6 & 0 \end{array} \right)$$

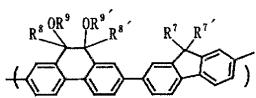
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(wherein R^6 and $R^{6'}$ represent a silyl group having a substituent, and R^7 and $R^{7'}$ represent an alkyl group), and

[Formula 8]



10 (wherein R⁷, R⁷, R⁸, R⁸, R⁹ and R⁹ represent an alkyl group).

8. A polymer compound according to any one of claims 4-7, wherein the alkyl group is an alkyl group having a carbon number of 1-20.

- 9. A method for producing a polymer compound, in which a polymer compound as claimed in any one of claims 4-8 is obtained by dehalogenation-polymerizing a dihalide as claimed in claim 1 or 2.
- 10. A method for producing a polymer compound according to claim 8, wherein the dehalogenation-polymerization is performed in the presence of a palladium or nickel compound.
 - 11. A thin film obtained by using a polymer compound as

claimed in any one of claims 4-8.